# STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2020-

AMENDMENT TO THE WATER QUALITY CONTROL POLICY ON THE USE OF COASTAL AND ESTUARINE WATERS FOR POWER PLANT COOLING TO REVISE COMPLIANCE SCHEDULES FOR ALAMITOS, HUNTINGTON BEACH, ORMOND BEACH, AND REDONDO BEACH GENERATING STATIONS AND DIABLO CANYON NUCLEAR POWER PLANT

#### WHEREAS:

- 1. The State Water Resources Control Board ("State Water Board") is designated as the state water pollution control agency for all purposes stated in the Clean Water Act, including water quality control planning and waste discharge regulation.
- 2. The State Water Board is responsible for adopting state policy for water quality control, which may consist of water quality principles, guidelines, and objectives deemed essential for water quality control.
- 3. On May 4, 2010, the State Water Board adopted the statewide "Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling" ("Once-Through Cooling" or "OTC Policy") under Resolution No. 2010-0020. The Office of Administrative Law approved the OTC Policy on September 27, 2010, and the OTC Policy became effective on October 1, 2010.
- 4. The OTC Policy establishes uniform, technology-based standards to implement Clean Water Act section 316(b), which requires that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impacts.
- 5. The OTC Policy applies to nine existing power plants located along the California coast, and is implemented through National Pollutant Discharge Elimination System ("NPDES") permits, issued pursuant to Clean Water Act section 402, which authorize the point source discharge of pollutants to navigable waters. The OTC Policy originally affected nineteen once-through cooling power plants, and ten of those facilities have ceased all once-through cooling operations since adoption of the OTC Policy.
- 6. The OTC Policy establishes a schedule that provides the latest compliance date for the replacement, repowering, or retirement of each remaining power plant still utilizing once-through cooling operations while accounting for potential impacts to California's electrical supply.
- 7. The OTC Policy was amended on July 19, 2011, making changes to compliance dates for power generating stations owned and operated by the Los Angeles Department of Water and Power ("LADWP") on a unit-by-unit basis rather than a facility-wide basis. The OTC Policy was amended on June 18, 2013, authorizing the

Regional Water Quality Control Boards to issue NPDES permits to point source dischargers in California, including power plants subject to the OTC Policy. The OTC Policy was amended on April 7, 2015, to extend the compliance date for the Moss Landing Power Plant from December 31, 2017, to December 31, 2020. The OTC Policy was last amended on August 15, 2017, to extend the compliance date for Encina Power Station from December 31, 2017, to December 31, 2018.

- 8. Section 3.A of the OTC Policy requires the owner or operator of an affected fossil-fuel power plant to submit an implementation plan to the State Water Board by April 1, 2011, selecting one of two OTC Policy compliance tracks and describing the general design, construction, or operational measures to implement the compliance track. The State Water Board received implementation plans from all owners and/or operators as requested, including the implementation plans for AES-Southland, Inc. ("AES") Alamitos Generating Station ("Alamitos"), AES Huntington Beach Generating Station ("Huntington Beach"), and AES Redondo Beach Generating Station ("Redondo Beach") and the GenOn Energy, Inc. ("GenOn") Ormond Beach Generating Station ("Ormond Beach"). Both AES and GenOn plan to comply with the OTC Policy through ceasing once-through cooling operations at the facilities listed above by the compliance dates.
- 9. The Statewide Advisory Committee on Cooling Water Intake Structures ("SACCWIS") is composed of representatives from the California Air Resources Board, the California Coastal Commission, the California Energy Commission, the California Public Utilities Commission ("CPUC"), the California State Lands Commission, the California Independent System Operator ("CAISO"), and the State Water Board. The purpose of the committee is to review implementation plans and schedules and to advise the State Water Board on OTC Policy implementation, in order to ensure that the implementation schedule takes into account local area and grid reliability, including permitting constraints.

Alamitos, Huntington Beach, Ormond Beach, and Redondo Beach Generating Stations

10. On June 20, 2019, the Assigned Commissioner and Administrative Law Judge in the CPUC Integrated Resource Planning proceeding ("Rulemaking R.16-02-007") (https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M302/K942/302942332.PDF) issued a ruling that identified a potential system capacity shortfall of between 2,300 and 4,400 MW in the CAISO Balancing Authority Area beginning in the summer of 2021. The analysis found that the potential shortfall arises from several factors, including shifts in peak demand to later in the day (shifting from 4 p.m. - 6 p.m. to 7 p.m. - 9 p.m.) and later in the year (shifting from August to September) when solar and wind resources are not as reliably available to meet peak demand; changes in the method for calculating the qualifying capacity of wind and solar resources resulting in lower qualifying capacity for these resources than previously determined; uncertainty regarding the level of imports on which California can depend in the future as other states also shift towards using more renewable energy resources; and unanticipated retirements of five non-OTC generating units.

- 11. On August 23, 2019, the SACCWIS approved the *Local and System-Wide 2021 Grid Reliability Studies* report, which assessed electric system reliability under study assumptions and scenarios. The analyses showed that it is necessary for Alamitos Units 3, 4, and 5 to be operational for two or more years to ensure local grid reliability, and for a portion of the available OTC units at Huntington Beach, Ormond Beach, and Redondo Beach to be operational for two or more years, but no longer than necessary, to address system-wide grid reliability concerns. The SACCWIS concluded that further information and analysis is needed before the committee could form a final recommendation on compliance date extensions for State Water Board consideration.
- 12. On November 7, 2019, the CPUC adopted Decision ("D.")19-11-016 (https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M319/K825/319825388.P DF). In the decision, the CPUC directed 3,300 MW of new capacity to be procured by 2023, with 50% (1,650 MW) of this procurement targeted to come online by August 1, 2021; 75% (an additional 825 MW) by August 1, 2022; and 100% (an additional 825 MW) by August 1, 2023, to address the system-wide capacity shortfall. The decision also recommended the following phased extensions to the OTC Policy compliance dates for specific generating units to support the procurement schedule:
  - a. Extend the compliance date of Alamitos Units 3, 4, and 5 for up to three years to December 31, 2023;
  - b. Extend the compliance date of Huntington Beach Unit 2 for up to three years to December 31, 2023;
  - c. Extend the compliance date of Ormond Beach Units 1 and 2 for up to one year to December 31, 2021; and
  - d. Extend the compliance date of Redondo Beach Units 5, 6, and 8 for up to two years to December 31, 2022.
    - These compliance date extensions would provide a "bridge" of roughly 3,740 MW in 2021, roughly 2,230 MW in 2022, and roughly 1,380 MW in 2023 as the 3,300 MW of new procurement comes online by 2023.
- 13. On January 23, 2020, the SACCWIS met and considered additional information and documents. The SACCWIS approved the *Recommended Compliance Date Extensions for Alamitos, Huntington Beach, Ormond Beach, and Redondo Beach Generating Stations* report and acknowledged that the CPUC's D.19-11-016, as Alternative 3, is sufficient to maintain grid reliability.
- 14. Also on January 23, 2020, the SACCWIS recommended, as Alternative 4, the State Water Board consider the following compliance date extensions in order to ensure local and system-wide grid reliability as new procurement directed by the CPUC comes online over the next three years to offset the potential energy shortfall:

- a. Extend the compliance date of Alamitos Units 3, 4, and 5 for three years to December 31, 2023;
- b. Extend the compliance date of Huntington Beach Unit 2 for three years to December 31, 2023;
- c. Extend the compliance date of Ormond Beach Units 1 and 2 for three years to December 31, 2023; and
- d. Extend the compliance date of Redondo Beach Units 5, 6, and 8 for one year to December 31, 2021.
- 15. The amendment to the OTC Policy extends the compliance dates for Alamitos Units 3, 4, and 5, Huntington Beach Unit 2, Ormond Beach Units 1 and 2, and Redondo Beach Units 5, 6, and 8 as recommended by the SACCWIS and as reflected in Attachment A. The amendment will be made to the implementation schedule as new lines for Milestones 30 and 34 of Table 1 in Section 3.E.
- 16.AES and GenOn, or future owners and operators of Alamitos, Huntington Beach, Redondo Beach, and Ormond Beach, will be required to continue complying with interim mitigation requirements up to and until final compliance with the OTC Policy.
- 17. The State Water Board adopted the OTC Policy with the explicit purpose of minimizing adverse environmental impacts to marine life resulting from use of coastal and estuarine waters for power plant cooling, and the State Water Board remains committed to timely compliance with the OTC Policy by owners and operators of affected power plants. Further, the State Water Board recognizes that OTC Policy compliance dates provide certainty to communities in planning for future land use.

In adopting the OTC Policy, the State Water Board recognized that power generating facilities are part of a state-wide electrical grid and that changes in generating capacity resulting from OTC Policy compliance may have an impact on the grid and power availability, requiring long-term planning for transmission, generation, and demand resources. The OTC Policy provided a lengthy compliance schedule based upon extensive consultation with the energy agencies in order to facilitate planning for potential replacement, repowering, or retirement of affected power plants while avoiding disruption in the state's electrical supply. The OTC Policy requires compliance as soon as possible, but no later than the dates set forth in the Policy Implementation Schedule (Policy Section 2.B.(1)), providing for State Water Board consideration of suspensions or revisions of compliance dates recommended by the energy agencies "based upon the need for continued operation of an existing power plant to maintain the reliability of the electrical system ...." (OTC Policy section 2.B.(2).) Provisions for NPDES permits implementing the OTC Policy further emphasize that compliance schedule revisions recommended by the SACCWIS are those "necessary to maintain reliability of the electric system." (OTC Policy section 3.C.(1).) The OTC Policy also directs that, where the energy

- agencies make a unanimous recommendation for compliance date revisions based on grid reliability, the State Water Board "shall afford significant weight to the recommendation." (OTC Policy section 3.B(5).)
- 18. The CPUC, CAISO, and CEC, in a joint submission to the State Water Board on May 27, 2020, affirmed the continued need for the extensions specified above. In August 2020, the CPUC, CAISO, and CEC updated the State Water Board on the progress of bringing new resources online to replace the affected facilities. The CPUC has established a process to track the procurement and development of the new projects fulfilling the 3,300 MW ordered by the CPUC in D.19-11-016. Currently, the process suggests that most projects needing to be developed by August 1, 2021, are meeting their development milestones. However, potential impacts from the coronavirus disease 2019 ("COVID-19"), shelter-at-home, and social distancing requirements may create new delay risks. Potential delays may also result from COVID-19-related supply chain issues and/or potential permitting or inspection delays resulting from agency staff, budget, or procedural constraints related to COVID-19.
- 19. The CPUC is continuing to monitor development of the new 1,650 MW of new resources targeted to come online by August 1, 2021, as set forth in Finding 12. However, if the CPUC's tracking of project development indicates a significant risk of delay in project online dates that would put California's electricity reliability at risk, the CPUC, CAISO, and CEC may return to the State Water Board in 2021 to request an additional one-year extension of OTC Policy compliance dates for units that are scheduled to comply at the end of 2021. The CPUC, CAISO, and CEC communicated that they will not make such a recommendation unless an extension is absolutely necessary for grid reliability. Therefore, in order to ensure transparency, the energy agencies will provide quarterly reports to the State Water Board providing the status of all projects that are anticipated to be online by August 1, 2021, their targeted online dates, and any identified risk of delays.
- 20. Portions of California were subject to rotating power outages during mid-August 2020 due largely to unexpectedly high peak energy demands during widespread extreme high temperatures. The CPUC, CAISO, and CEC may be revising their forecasting models to account for this scenario, and may determine that there is a need to request additional extensions of final compliance dates to maintain grid reliability and avoid similar blackouts in the future.
- 21. Should there be a need for additional extensions, the OTC Policy provides expedited relief from final compliance dates as necessary to maintain grid reliability. Section 2.B(2)(a) of the OTC Policy allows the CAISO to notify the State Water Board that CAISO is extending the compliance date by 90 days (e.g., to March 31, 2022) as long as neither the CEC nor CPUC object in writing within ten days. If CAISO notifies the State Water Board that an extension beyond March 31, 2022, is needed for grid reliability, Section 2.B(2)(b) of the OTC Policy requires the State Water Board to conduct an expedited hearing within 90 days of receiving the notification. At the conclusion of the hearing, Section 2.B(2)(b) authorizes the State Water Board

to suspend the final compliance date indefinitely, pending its full evaluation and consideration of an amendment to the OTC Policy's final compliance date. Pursuant to Section 2.B(2)(d) of the OTC Policy, the State Water Board, in considering whether to suspend or amend the final compliance dates, shall afford significant weight to the recommendations of the CAISO. The State Water Board commits to act expeditiously to evaluate whether to suspend or amend the final compliance date beyond 90 days.

22. The State Water Board's primary responsibility and jurisdiction is to implement CWA 316(b) and ensure that the beneficial uses of the state's coastal and estuarine waters are protected. The compliance schedule revisions for Huntington Beach, Alamitos, Ormond Beach, and Redondo Beach are adopted in order to provide for grid reliability needed in the short term and should not be interpreted in any way as the State Water Board retreating from its goal of phasing out adverse environmental impacts resulting from use of coastal and estuarine waters for once-through cooling.

## Diablo Canyon Nuclear Power Plant

- 23. On January 17, 2020, the State Water Board received a letter from the Pacific Gas and Electric Company (PG&E) requesting amendment of the OTC Policy compliance dates for Diablo Canyon Nuclear Power Plant Units 1 and 2 to conform with the expiration dates of the current Nuclear Regulatory Commission (NRC) licenses for each unit and PG&E's plan to permanently retire the units as approved by the CPUC in 2018. During development of the OTC Policy, PG&E noted the discrepancy of the OTC Policy compliance date not matching the NRC license expiration dates of Units 1 and 2. Following PG&E's decision to not pursue renewal of the NRC licenses for Units 1 and 2 beyond 2024 and 2025, PG&E requested an amendment to conform the compliance dates in the OTC Policy. The CPUC, in their D. 18-01-002, supports the operation of Unit 2 through the end of its current NRC license as part of Diablo Canyon's retirement plan.
- 24. The amendment to the OTC Policy shortens the compliance date for Diablo Canyon Nuclear Power Plant Unit 1 by approximately two months from December 31, 2024, to November 2, 2024, and extends the compliance date for Unit 2 by approximately nine months from December 31, 2024, to August 26, 2025. As reflected in Attachment A, the amendment will be made to the implementation schedule as new lines for Milestones 36 and 38 of Table 1 in Section 3.E.
- 25. PG&E will be required to continue complying with interim mitigation requirements up to and until final compliance with the OTC Policy.

#### Administrative Amendments

26. Section 3.B(5) of the OTC Policy states that the State Water Board shall consider the SACCWIS' recommendations for compliance date extensions and direct staff to make modifications to the OTC Policy, if appropriate, for the State Water Board member's consideration. As reflected in Attachment A, the amendment to Section

- 3.B(5) of the OTC Policy modifies this process so that the State Water Board will consider the SACCWIS' recommendations and consider modifications to the OTC Policy, if appropriate, without first directing staff to make modifications to the OTC Policy. In order to expeditiously address compliance date revisions recommended by the SACCWIS, staff may use information items and briefings to apprise State Water Board members of SACCWIS' recommendations while simultaneously drafting an amendment for State Water Board consideration as soon as practicable.
- 27. On March 27, 2014, LADWP sent a letter to the State Water Board requesting to change the annual due date of its grid reliability report from December 31 of a given year to January 31 of a given year. The additional month provides time for LADWP to incorporate information from the Ten-Year Transmission Assessment and the Integrated Resources Plan, which are finalized by December 31, into their grid reliability report and present the report to the LADWP Board of Water and Power Commissioners prior to submittal to the SACCWIS. In a letter dated April 24, 2014, the State Water Board directed LADWP to submit its annual grid reliability report by January 31 of each year pursuant to a Water Code Section 13383 letter order, and LADWP has done so since 2014. The amendment to Section 3.B(3) of the OTC Policy changes the due date of LADWP's annual grid reliability report from December 31 to January 31 of a given year, as reflected in Attachment A.
- 28. The amendment to the OTC Policy will reformat and non-substantively revise text in the OTC Policy to improve readability and comply with California Government Code Section 11546.7 document accessibility requirements.

## California Environmental Quality Act

- 29. The California Natural Resources Agency approved the State Water Board's water quality control planning process as a certified regulatory program that adequately satisfies the California Environmental Quality Act (CEQA) requirements for preparing environmental documents (California Code of Regulations, title 23, section 3777). A substitute environmental document (SED) is used in place of an environmental impact report as CEQA environmental documentation.
- 30. The "Amendment to the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling for Extension of Compliance Schedules of Alamitos, Huntington Beach, Ormond Beach, and Redondo Beach Generating Stations Staff Report" ("Staff Report") contains the required environmental documentation under the State Water Board's CEQA regulations. The changes in compliance dates do not constitute a project within the meaning of CEQA. Nonetheless, the addendum to the Final SED adopted with the OTC Policy on May 4, 2010, concludes that revising compliance dates does not lead to new significant environmental impacts or a substantial increase in the severity of previously identified environmental effects. The addendum to the Final SED is included as Section 8 of the Staff Report.

31. Consistent with CEQA, the State Water Board finds the Staff Report does not engage in speculation, but rather analyzes the project and the alternatives to the project, and concludes that the project will not result in any additional environmental impacts.

#### **Public Process**

- 32. The State Water Board provided a written public comment period from March 18, 2020, through noon on May 18, 2020. During the comment period, the State Water Board held a public board workshop on April 21, 2020, providing an opportunity for open discussion between State Water Board members, staff, and the public on the proposed amendment to the OTC Policy.
- 33. The State Water Board carefully considered comments received and responded to comments. Based on the comments, the State Water Board revised the proposed amendment to the OTC Policy and the Staff Report. The responses to comments and revisions to the Staff Report do not add significant new information that is material to the State Water Board's decision or that would otherwise warrant action that is not a logical outgrowth of the proposed amendment that was previously subject to a written comment period. Therefore, it is not necessary to afford interested persons with another written comment period to address the responses to comments or revisions to the Staff Report.
- 34. The State Water Board conducted a public hearing in Sacramento on September 1, 2020, to solicit comments regarding the proposed amendment to the OTC Policy and has reviewed and carefully considered all comments and testimony received.

#### **Effective Date**

35. The amendment to the OTC Policy will become effective upon approval by the Office of Administrative Law.

#### THEREFORE BE IT RESOLVED THAT:

#### The State Water Board:

- 1. Approves and adopts the Staff Report and Addendum to the 2010 Final SED and directs the Executive Director or designee to transmit the Notice of Decision to the Secretary of Resources, attached hereto.
- 2. Adopts the amendment to the OTC Policy as reflected in Attachment A, attached hereto.
- 3. Authorizes the Executive Director or designee to submit the amendment to the Office of Administrative Law for review and approval.

4. If, during the approval process, Water Board staff or the Office of Administrative Law determines that minor, non-substantive modifications to the language of the amendment are needed for clarity or consistency, the Executive Director or designee may make such changes and shall inform the State Water Board of any such changes.

#### **CERTIFICATION**

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on September 1, 2020.

Jeanine Townsend Clerk to the Board